



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,547	09/08/2003	David S. Breed	ATI-306	9883
22846	7590	07/27/2004	EXAMINER	
BRIAN ROFFE, ESQ 11 SUNRISE PLAZA, SUITE 303 VALLEY STREAM, NY 11580-6170				JACKSON, ANDRE L
ART UNIT		PAPER NUMBER		
3677				

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/657,547	BREED ET AL.
Examiner	Art Unit	
Andre' L. Jackson	3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 02 July 2004.  
 2a) This action is **FINAL**.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-23 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-23 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

**Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over RE 38, 400 to Kowall et al. Kowall et al discloses a power operated lift gate of a vehicle (10) enabling the lift gate (14) to be moved relative to a lift gate frame from a closed position to a plurality of open positions, the vehicle further comprising;

a motor (28) coupled to the lift gate and arranged to move the lift gate from the closed position to any of the open positions; detecting means (108) for detecting resistance to opening movement of the door; a processor (102) coupled to the detecting means and the motor for receiving the detected resistance to the opening movement of the lift gate and directing the motor to stop the opening movement of the lift gate when the detected resistance is above a threshold, the motor is de-coupled from the lift gate when the torque is above the threshold such that the motor is disengaged from the lift gate and the lift gate is movable without causing damage to the motor, further the detecting means defining a pressure switch (col. 4, lines 6-8) including a pressure sensitive surface or toggle button actuated to cause movement of the lift gate to be stopped. However, Kowall et al fails to disclose that the power lift gate is arranged to move in lateral direction alongside the frame in a plurality of laterally open positions as claimed.

It would have been obvious to one having ordinary skill in the art at the time of applicant's invention was made to modify the lift gate of Kowall et al from a vertical disposed operating position to a substantially transverse lateral operating position as claimed, since it has been held that a mere reversal in orientation of the essential working parts of a device involves only routine skill in the art. Furthermore, lateral swinging rear tail gates are well known and used in the automobile industry for their practicality and those manufactures desiring uniformity to have all doors of a vehicle operable in the same manner is advantageous and attractive to consumers.

As to claims 3, 7, 11-13 and 15-17, Kowall et al (col. 7, lines 65-67 & col. 8, lines 1-49) further discloses various obstruction detecting methods, such as, using a detection circuit or sensor to monitor the speed of the motor. A second method uses temperature sensors to detect any excessive heat causing abnormal current to the motor and the third method uses a pressure sensor (106), which measures the rate of change of the lift gate relative to the rate of voltage (normal motor velocity) necessary to move the lift gate in an opening direction. All three of these methods monitor force or torque applied to the motor or lift gate at which an obstruction is assumed defining the threshold and the motor is directed to shut off and disengage from the lift gate.

As to claims 18 and 19, Kowall et al discloses a conventional remote key fob and does not specifically disclose arranging a sensor on the vehicle to cause a radio frequency device to emit a signal back to the sensor with the signal emission being indicative of the presence of an authorized user as claimed. However, it is known within the art that a key fob is a type of security object with hardware having built-in authentication peripherals.

The peripherals in the key fob control access to information. Some key fobs provide two-factor authentication, where the user has a personal identification number (PIN), which authenticates them as the fob's owner and an original identification code assigned to an individual key fob; after the user correctly enters their PIN or the identification code is communicated, the fob displays a number which allows them to access information or in this case, perform commands related to a vehicle. Therefore, it is obvious to one of ordinary skill in the art that some sophisticated remote key fobs may be linked to a remote entry receiver or sensor, which in turn is linked to a microprocessor storing, among other things, authentication codes and other related data. It is envisaged that when a user is near his or her vehicle, depression of a button on the key fob for entry into the vehicle will activate an authentication sweep transmitted to the remote entry receiver or sensor, the receiver or sensor waits for positive matching of the user's key fob unique identification code stored in the microprocessor and causes the key fob to emit a signal back to the receiver or sensor with proof or authentication of the identification code of the key fob. If this signal an exact match the user's initial depression for entry is granted which affords a high level of anti-theft deterrence. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to modify the power lift gate of Kowall et al to include a technically developed radio frequency identification device that affords a high level of security for a user.

### **Response to Applicant's Arguments**

Applicant's arguments filed in the amendment on July 2, 2004 have been fully considered but they are not persuasive. In response to applicant's remarks on pages 8-12 of the above amendment that the prior art (Kowall et al) does not disclose or suggest the combination of limitations presented in applicant's claims is found not to be persuasive.

On pages 8 and 9, applicant's remarks pertain to the question of non-obviousness, more specifically applicant asserts that Kowall et al refers to a lift gate or tailgate system which operates by hinges to swing upward or about a horizontal axis of the hinges to close or uncover access to the interior portion of the vehicle. Applicant states Kowall et al does not disclose or suggest a door or tailgate mounted in a door frame including an infinite door check mechanisms enabling the door to move to various laterally disposed positions thereof as claimed. Although, applicant correctly states the operation of the lift gate as disclosed by Kowall et al, Kowall et al does not represent all rear tailgate assemblies. It is well known within the automobile industry (known concept) for manufacturers to employ rear deck lids or tailgates having split rear decks or full side opening tailgates. For example, some vehicle models (i.e. station wagons or SUV) may include a split deck lid design, where an upper part represents a rear glass lift gate capable of being swung upwardly, similar to the lift gate of Kowall et al and a lower part represents a side or lateral opening swing gate or door of the type identical to applicant's invention. Since this concept is well known within the art, it would be obvious to one having ordinary skill in the art at the time of applicant's invention to convert the working parts of a lift gate/tailgate from a vertical operating position to a lateral operating position, since a mere change in operating direction of the essential working parts of a device involves only routine skill in the art.

Furthermore, on page 19, lines 26-30 of applicant's disclosure, applicant admits that applicant's infinite door check mechanism in the preferred embodiment (lateral door movement) can be modified in design to be arranged in other known operating directions or orientations. Therefore, the Examiner believes Kowall et al does meet the limitations of applicant's amended claims 1 and 5.

As to applicant's remarks on pages 9 and 10 asserting that Kowall et al does not disclose or suggest an arrangement as claimed where a motor is de-coupled from a door to prevent damage to the motor when excessive torque (manual applied force) is detected on the motor. Once a velocity of the door is zero or the manual applied force is removed the motor is re-coupled and engaged with the door. This argument is found not to be persuasive.

At first look at applicant's amended claims reciting the above limitations and applicant's definition of what is meant by the term de-coupling on page 10, second paragraph, one of ordinary skill in the art may believe or lead to believe that applicant's power motor undergoes a "physical" separation or "physical" disengagement from the door. However, after reviewing applicant's disclosure (pages 34 and 35), the Examiner believes the separation or de-coupling of the motor from the door is not an actual physical movement between the motor and door, whether a link between the motor and the door is interrupted or broken, that link being in the form of a sensor. In light of the disclosure relied upon by the Examiner, the motor (28) of Kowall et al is first coupled to the door via an actuator mechanism (24), monitoring of the torque on the motor is achieved by sensors (134, 138) linked to a sensor (106) monitoring the movement of the door or tailgate. De-coupling (loss of transmission, sensor interruption, break in current or link) the motor from the door when the torque is above a threshold (col. 8, lines 21-25) enabling the

motor to be disengaged from the door and the door is movable (although not desirable) by a manual force without damage to the motor. Furthermore, the recitation "and the door is movable" only requires the ability to be so performed and is not a positive limitation requiring patentable weight. For the reasons listed above, the Examiner believes Kowall et al meets the limitations of applicant's amended claims 9 and 14.

As to applicant's remarks on page 11 that Kowall et al does not disclose or suggest a sensor arranged on a vehicle generating a signal which causes a response to be sent from an identification device (remote key fob) back to the sensor with the signal analyzing the presence of an authorized user is found not to be persuasive. Although Kowall et al discloses a conventional remote key fob without developing the specific limitations as amended in applicant's claims. It is known within the art that a key fob is a type of security object with hardware having built-in authentication peripherals. The peripherals in the key fob control access to information. Some key fobs provide two-factor authentication, where the user has a personal identification number (PIN), which authenticates them as the fob's owner or an original identification code assigned to an individual key fob; after the user correctly enters their PIN or the identification code is communicated, the fob displays a number which allows them to access information or in this case, perform commands related to a vehicle. Therefore, it is obvious to one of ordinary skill in the art that some sophisticated remote key fobs may be linked to a remote entry receiver or sensor, which in turn is linked to a microprocessor storing, among other things, authentication codes and other related data. It is envisaged that when a user is near his or her vehicle, depression of a button on the key fob for entry into the vehicle will activate an authentication sweep transmitted to the remote entry receiver or sensor, the receiver or sensor

Art Unit: 3677

waits for positive matching of the user's key fob unique identification code stored in the microprocessor and causes the key fob to emit a signal back to the receiver or sensor with proof or authentication of the identification code of the key fob, if this signal is exact, the user's initial depression for entry is granted providing a high level of anti-theft deterrence. Therefore, the identification device as described above would have been obvious at the time of applicant's invention and the Examiner believes applicant's amended claims 18 and 19 are unpatentable over Kowall et al.

For the reasoning provided above, the Examiner believes applicant's claims, as amended, are not patentable over Kowall et al. Accordingly, claims 1-23 are rejected.

### **Conclusion**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre' L. Jackson whose telephone number is (703) 605-4276. The examiner can normally be reached on Mon. - Fri. (10 am - 6 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy J. Swann can be reached on (703) 306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

André L. Jackson  
Patent Examiner  
AU 3677

ALJ



ROBERT J. SANDY  
PRIMARY EXAMINER